IN THE CLAIMS:

The following is a listing of the claims, with claims 1-5, 9-14, 18-22 and 26, shown as amended and with claims 6-8, 15-17 and 23-25 cancelled.

LISTING OF CLAIMS

Claim 1. (currently amended) ~~An apparatus for securing communication information in CDMA communication system~~ A terminal for CDMA mobile communication system of IS-95 standard having data protection function, comprising:

a vocoder encoding the input analog signal as an information bit having a predetermined size and generating a vocoder packet ~~information bit~~;

an encryptor encrypting the vocoder packet ~~information bit~~ from said vocoder and generating the encrypted vocoder packet;

a vocoder framer adding a format bit/format bits indicating the vocoder rate and, as a result, generating the encrypted vocoder frame;

a CDMA framer adding a frame quality indicator and the encoder tail bits to the encrypted vocoder frame ~~packet information bit~~ from said vocoder framer ~~said encrypter~~ to configure as a CDMA frame;

a CDMA frame transmitter transmitting a CDMA frame which passes a convolutional encoder, interleaver, and modulator in sequence, to a base station through an assigned frequency band;

a CDMA frame receiver receiving a signal from the base station and reproducing the CDMA frame;

a CDMA deframer extracting the encrypted vocoder frame ~~packet information bit~~ from the CDMA frame reproduced by said CDMA frame receiver;

a vocoder deframer deleting a format bit/format bits indicating the vocoder rate from the encrypted vocoder frame and, as a result, extracting the encrypted vocoder packet;

a decryptor decrypting the encrypted vocoder packet ~~information bit~~ extracted by said <u>vocoder deframer</u> ~~CDMA deframer~~; and

a vocoder decoding the decrypted vocoder packet ~~information bit~~ from said decryptor as an analog signal~~,~~

~~wherein said encryptor encrypts the vocoder packet information bit using a block cipher and a security key, said decryptor decrypts the encrypted vocoder packet information bit using said block cipher and a security key shared with the other mobile.~~

Claim 2. (currently amended) ~~The apparatus~~ <u>The terminal for CDMA mobile communication system having data protection function</u> according to claim 1, wherein <u>said encryptor encrypts using a block cipher such as DES, 3DES or a stream cipher, and a secret key, said decryptor decrypts using said block cipher or said stream cipher and the secret key shared by the other terminal</u> ~~the block cipher is DES~~.

Claim 3. (currently amended)   ~~The apparatus~~ <u>The terminal for CDMA mobile communication system having data protection function</u> according to claim 1, wherein said encryptor performs or bypasses the encryption by a security mode that a user <u>set to ON or OFF</u> ~~enters~~.

Claim 4. (currently amended)   ~~The apparatus~~ <u>The terminal for CDMA mobile communication system having data protection function</u> according to claim 3, wherein said encryptor generates a predetermined pattern corresponding to <u>ON or OFF of</u> the security mode ~~ON or OFF~~ and adds the generated pattern to <u>the format bit/bits</u> ~~the information bit~~ of the traffic channel, and transmits it to the other <u>terminal</u> ~~mobile~~, wherein said decryptor performs or bypasses the decryption <u>by setting ON or OFF of said security mode</u> by said <u>received</u> pattern.

Claim 5. (currently amended)   ~~The apparatus~~ The terminal for CDMA mobile communication system having data protection function according to claim 4 3, wherein said encryptor adds the encrypted secret ~~security~~ key to the format bit/bits and the predetermined security mode pattern ~~the information bit~~ of the traffic channel when the security mode is set to ON, wherein said decryptor recovers the secret key included in the vocoder frame of the traffic channel, and decrypts the encrypted vocoder packet ~~information bit~~ using said recovered secret key ~~by said security key included in the information bit of the traffic channel~~.

Claims 6-8. (Deleted).

Claim 9. (currently amended)   ~~The apparatus~~ The terminal for CDMA mobile communication system having data protection function according to claim 1, wherein said encryptor encrypts all or a ~~the~~ part of the vocoder packet ~~information bits~~, wherein said decryptor decrypts all or a ~~the~~ part of the encrypted vocoder packet ~~information bits~~.

Claim 10. (currently amended)   A method for encrypting and transmitting information bit in CDMA mobile communication system of IS-95 standard, ~~for securing communication information in CDMA communication system~~ comprising the steps of:

(a) encoding an input ~~analog~~ signal as an information bit having a predetermined size and generating a vocoder packet ~~information bit~~;

(b)   encrypting said encoded vocoder packet ~~information bit using a block cipher and a security key~~;

(c)   adding a format bit/format bits indicating the vocoder rate, resulting the encrypted vocoder frame, and then adding a frame quality indicator and the encoder tail bits to the encrypted vocoder frame ~~packet information bit~~ and configuring it as a CDMA frame; and

(d)   transmitting the CDMA frame which passes a convolutional encoder, interleaver, and modulator in sequence, to a base station through an assigned frequency band.

Claim 11. (currently amended)   A method for encrypting and transmitting information bit in CDMA mobile communication system according to claim 10, wherein said step (b) encrypts using a block cipher such as DES, 3DES or a system cipher, and a secret key ~~block cipher is DES~~.

Claim 12. (currently amended)   A method for encrypting and transmitting information bit in CDMA mobile communication system according to claim ~~10~~ 11, wherein said step (b) performs or bypasses ~~of encrypting comprises the step of performing or bypassing~~ the encryption by a security mode that a user set ~~enters~~.

Claim 13. (currently amended)   A method for encrypting and transmitting information bit in CDMA mobile communication system according to claim 12, wherein said step (b) generates ~~of encrypting comprise the steps of generating~~ a predetermined pattern corresponding to ON or OFF of the security mode ~~ON or OFF~~ and adds ~~adding~~ the pattern to the information bit of the traffic channel.

Claim 14. (currently amended)   A method for encrypting and transmitting information bit in CDMA mobile communication system according to claim

13, wherein said step (b) adds ~~of encrypting comprises the step of adding~~ said secret ~~security~~ key to the information bit of the traffic channel when the security mode is set to ON.

Claims 15-17 deleted.

Claim 18. (currently amended)   The method for encrypting and transmitting information bit in CDMA mobile communication system according to claim 10, wherein said step (b) encrypts ~~of encrypting comprises the step of encrypting~~ only a ~~the~~ part of the vocoder packet ~~information bits~~.

Claim 19. (currently amended)   A method for receiving and decrypting information bit encrypted by terminal for CDMA mobile communication system of IS-95 standard, ~~for securing communication information in CDMA communication system~~ comprising the steps of:

(a) receiving a signal from a base station, and reproducing it as a CDMA frame;

(b)   extracting an encrypted vocoder frame ~~packet information bit~~ from the reproduced CDMA frame;

(c)   extracting the encrypted vocoder packet from the extracted vocoder frame;

(d)   decrypted the encrypted vocoder packet ~~information bit by block cipher and a security key~~; and

(e)   decoding the decrypted vocoder packet ~~information bit~~ .

Claim 20. (currently amended)   The method <u>for receiving and decrypting</u> <u>information bit encrypted by terminal for CDMA mobile communication system</u> according to claim 19, wherein said <u>step (b) decrypts using a block cipher such as DES,</u> <u>3DES or a system cipher, and a secret key</u> ~~block cipher is DES~~.

Claim 21. (currently amended)   The method <u>for receiving and decrypting</u> <u>information bit encrypted by terminal for CDMA mobile communication system</u> according to claim ~~19~~ <u>20</u>, wherein said step <u>(d) set</u> ~~of decrypting comprises the steps of~~ ~~setting~~ a security mode to ON or OFF according to the predetermined pattern included in the received information bit of the traffic channel, and <u>determines</u> ~~determining~~ according to the security mode whether the decryption process is to be performed or not.

Claim 22. (currently amended)   The method <u>for receiving and decrypting</u> <u>information bit encrypted by terminal for CDMA mobile communication system</u> according to claim 21, wherein said <u>secret</u> ~~security~~ key is that included in the information bits of the traffic channel received when the security mode is set to ON.

Claims 23-25 deleted.

Claim 26 (currently amended)   The method <u>for receiving and decrypting</u> <u>information bit encrypted by terminal for CDMA mobile communication system</u> according to claim 19, wherein said step <u>(d) decrypts</u> ~~of decrypting comprises the steps~~ ~~of decrypting~~ only <u>a</u> ~~the~~ part of <u>the encrypted information bit from</u> the encrypted vocoder packet ~~information bit~~.